

Claims

We claim:

1. A corrosion inhibiting composition comprising:

(a) an aliphatic amine,

(b) an azole selected from the group consisting of (1) tolyltriazole, (2) benzotriazole, and (3) mixtures thereof, and

(c) a benzoate.

such that the weight ratio of amine to azole in the composition is from 50:1 to 30:1 and the weight ratio of benzoate to azole in the composition is from 40:1 to 150:1.

2. The corrosion inhibiting composition of claim 1 wherein the aliphatic amine is an alkanolamine.

3. The corrosion inhibiting composition of claim 2 wherein the benzoate is ammonium benzoate.

4. The corrosion inhibiting composition of claim 3 wherein the weight ratio of amine to azole in the composition is about 35:1 to 45:1 and the weight ratio of benzoate to azole in the composition is from about 80:1 to 120:1.

5. The corrosion inhibiting composition of claim 4 which contains 0 parts of aldonic acid and less than 1.0 part of inorganic salt per 100 parts of corrosion inhibiting composition.

1 6. The corrosion inhibiting composition of claim 5 which contains 0 parts of
2 inorganic salts.

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4 7. A process for inhibiting the vapor phase corrosion of metal equipment, which
5 comprises treating said equipment with an effective corrosion inhibiting amount
6 of a corrosion inhibitor composition of claims 1, 2, 3, 4, 5, or 6.

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8 8. The process of claim 7 wherein the amount of corrosion inhibiting composition
9 used in the aqueous system treated is from 1 percent to 5 percent.

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11 9. The process of claim 8 wherein the metal equipment is made from a metal
12 selected from the group consisting of cast iron and aluminum.

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14 10. The process of claim 9 wherein the metal equipment contains recesses where
15 water is collected.

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17 11. The process of claim 10 wherein the metal equipment is an automotive engine.

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